Date.	Char- acter.	Phase.	Time.	Pe- riod. T.	Ampl	itude.	Dis- tance.	Remarks.
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Canada. Ottawa. Dominion Astronomical Observatory. Earthquake Station. Otto Klotz.

Lat., 45° 23' 38" N.; long., 75° 42' 57" W. Elevation, 83 meters.

Instruments: Two Bosch photographic horizontal pendulums, one Spindler & Hoyer, 80 kg. vertical seismograph.

Instrumental constants: 120 26.

1918. Jan. 4		eS?w	H. m	. s. 44	Sec.	μ	μ	κm.	
		eL <sub>N</sub>	4 46	30+				.1	
	1 i	L	4 49	٠	24				į
		$L_{N}$		to				1	
		F	5 20						Irregular period mingled with mi croseisms.
13	l	6=	0 00	00	3				
20	ł	en	ŏŏ	38	4				
		eL <sub>N</sub>	0 01	. 04	6				İ
	1	М	0 03	36†	7				1
		F	0 10						
25		0	1 21	32	ca	l	İ	3,600ca	Δfrom eL-P. N
		P	1 28	20	2				trace of S. Heav
		e	1 35	48	2				microseisms.
		eL <sub>n</sub>		24	28				
	1	L	1 41		22				1
	î l	F	2	• • •		¦	• • • • • • •		
30		0	21 18	46				8,560	
		i8	21 30 21 40	24					ŧ
	1	10	21 42	19			ļ		†
	1 1	eL	21 56	301	28				<del> </del>
	<b>∤</b>	T.	22 0		18				
	1	L <sub>w</sub>	22 09	)	28 18 15				
		L <sub>N</sub>	22 20		15			.	
	1	F			22-35			.	}

† Original time was in tenths of a minute.

Canada. Toronto. Dominion Meteorological Service.

Lat., 43° 40′ 01″ N.; long., 79° 23′ 54″ W. Elevation, 113.7 meters. Subsoil: Sand and clay.

Instrument: Milne horizontal pendulum, North. In the meridian.

Testrumental constant... 18. Pillar deviation, 1 mm, swing of boom=0.59".

1918. an. 4		eL eL iL M	H. m. s. 4 47 36 4 49 24 4 50 00 4 50 42 5 26 18	Sec.	μ *1,800	μ	km.	P and S not re- corded.
4		eL M F	16 55 18 17 04 00 17 35 48		*600			Distant quake Marked gradua thickening.
12		L	23 34 12 23 36 54		*100			Air currents going on.
13	<u> </u>	L	0 04 36 0 12 24		*200			Air currents going on.
16		L eL M F	13 46 30 13 51 24 13 55 48 14 23 12		*300			May not be sels mic.
21		L L M	20 54 06 20 58 06 21 04 48 21 23 00			 		
24		eL e eL M F	15 42 48 15 46 54 15 50 18 15 54 12 16 30 54					Gradual thicken ing.
25		P? eS. eL. iL	1 25 36 1 29 48 1 34 00 1 37 12 1 37 48 1 40 54					Air currents going
30		M F IS L F	1 41 54 21 41 36 21 41 48 21 59 18 22 07 00		*2,400	.		"A. C." P not definite Amplitude of a waves gradually became less. "A. C."

\* Trace amplitude,

Date. Character. Phase. Time. Period. T.	Amplitude. Distance,	marks.
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Canada. Victoria, B. C. Dominion Meteorological Service.

Lat., 48° 24' N.; long., 123° 19' W. Elevation, 67.7 meters. Subsoil: Rock.

Instruments: Wiechert, vertical. Milne horizontal pendulum, North; in the meridian.

Instrumental constant.. 18. Pillar deviation: 1 mm, swing of boom=0.54".

1918.	l 1		H.m. s.	Sec.	Д	μ	km.	
Jan. 4	[]	87	4 46 01	1				
		L	4 50 02 4 56 22					ľ
	1 1	Ī	4 58 22					
	!	M	5 03 08	1	*1,000			
	1 1	F	5 29 43		-1,000	1		
	1 1		VERT		4_			
	l I				Az	ĺ	1	
		M	5 01 <b>3</b> 0	18	1		• • • • • • • • • • • • • • • • • • • •	
4	l	P	16 26 13		<b></b>	<u> </u>		
-		L	16 35 04			i		
	}	M	16 39 00	1	*400			Į.
	ļ l	F	17 02 37			1		
	i l							
12	I I	P or L	23 48 49	1	1			•
		М	23 48 49 23 50 18		*200			
		P?or L	00.20.01		1	i		
21		L?	20 30 21 20 39 12			i		
	i :		20 00 12					
	1 1	М	20 47 18		*300	i		
		F	21 05 46					
24	l	P?	15 40 12	1				
		М	15 43 39		*100			
		F	15 48 04					
25		P or S?	1 35 35				1	Trace indistinct.
20		L?	1 40 03					lige masumer.
	1 1		1 40 00			,		
	1	L	1 45 30				j	
		M	1 48 28 2 18 13		+500			
		F	2 18 13	•••••	·]			
30		P?	21 23 30 21 28 32 21 33 59 21 37 16					Vertical record ill
•		8?	21 28 32		1	1		defined.
		L?	21 33 50		1	1		
		Į	21 27 18			1		1
	1	и	21 27 48		*500		3,270	l
	I		00 10 24	1	7000		0,210	Į
	1	Lrep	21 37 46 22 18 34 22 33 00			1		l
	1 1	F	22 83 00					ŀ

<sup>\*</sup> Trace amplitude.

## SEISMOLOGICAL DISPATCHES.1

Geneva, January 3, 1918.

The Zurich observatory reports that a serious earthquake which was recorded recently has been located at Oberammergau, in upper Bavaria, and also in the upper valley of the Lech River. (Associated Press.)

Washington, D. C., January 4, 1918.

The entire city of Guatemala was wiped out by an earthquake shock Friday night (Jan. 4) at 10.45 o'clock. (Radio dispatch from Darien to the War Department.)

Washington, D. C., January 5, 1918.

Our manager at San Jose, Guatemala, telegraphs the following: "What was left of Guatemala City is now wiped out. Shocks at 10.35 p. m. finished everything. Steam is now coming up in the streets. ('athedral fallen; 300 killed.'" (Dispatch from the Central and American Telegraph Co.)

Guatemala City, January 5, 1918.

The earthquakes here continue with varying frequency and intensity. The capitol is in ruins. (Associated Press.)

Washington, D. C., January 27, 1918.

Further severe earthquake shocks in Guatemala City, capital of Guatemala, were reported yesterday to the State Department by the American legation there. No details of the extent of the damage were given.

given.

Extensive damage was done to the city by earthquakes last month.

(State Department)

(State Department.)

<sup>&</sup>lt;sup>1</sup> Reported by the organization indicated and collected by the seismological station of Georgetown University, Washington, D. C.